



Illegal Prepaid Vending Challenges in South Africa

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Introduction and Context setting



The scourge of electricity theft through Ghost CDU (Credit Dispensing Unit) vending is becoming a serious challenge for Eskom. This results in significant revenue and electricity losses to the utility, and cannot be left to continue unabated.

When this problem started in the early to mid 1990's, it was an individualised crime. It has however **grown** to a crime where **syndicates** are running the show. This has become a **specialised crime and more dangerous** and hence we needed specialised resources to address it. We had to get the Law Enforcement Agencies on board especially the SAPS, SIU, the Hawks and AFU





Loss Quantified

Estimation of the Loss suffered by Eskom



- Estimating the loss incurred by any utility through this process one must make a few assumptions. In Eskom we looked at two sources of information to establish a range for the loss incurred. One source is the Eskom Customer Care and Billing system, where we can track which prepaid customers are not purchasing their electricity from Eskom legal vendors. The other data used for this came from Revenue Protection audits (both desk top and field) conducted within the prepaid environment.
- By matching data from the desktop and field audits, to the customer database, we established that out of the roughly 4 million prepaid customers about 310 000 were not purchasing their electricity from the legal Eskom vendors. That translates into a revenue loss to Eskom of about R342 million per annum if one takes the average monthly electricity purchase of roughly R92 for prepaid customers. There is a very high probability that these customers are purchasing from illegal vendors.

Estimation of the Loss suffered by Eskom ...



 Based on the transaction history from the recovered CDUs, it was established that on average they were selling electricity worth about R450 000 per month. Considering the number of the missing CDUs, this translates to roughly R378 million losses for the utility.

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Estimation of the Loss suffered by Eskom ...



- One can safely say the utility is losing roughly between R342 million and R378 million per annum due to these illegal vendors. These are rough figures to illustrate how serious the problem is.
- It might not necessarily be possible to establish an accurate figure until ALL the stolen CDUs are recovered and downloaded to see the transaction history of each CDU. But the rough figures give us a very good indication of the magnitude of our problem.
- The utility is using huge sums of money on Ghost CDU Vending investigations, educational and advertising campaigns to inform South Africans about the negative impact of buying electricity from these illegal vendors. This money could be better utilised elsewhere e.g. electrifying villages in desperately need of electricity.
- One does not have a view of what is happening in the various municipalities. However, based on the Eskom loss figures, one can imagine what the total South African loss could be.



Ghost Vending Modus Operandi

Ghost Vending Modus Operandi

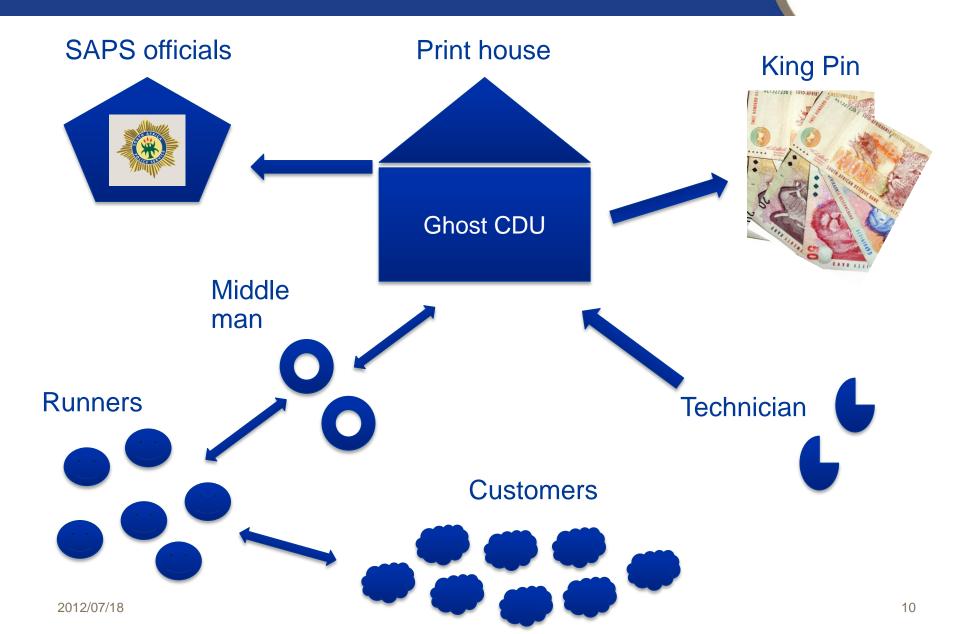


- Generally Ghost vending operations operate in a pyramid type structure. At apex of the pyramid sits the ring-leader, who owns the CDU. Below the mastermind, sit the inner-circle team highly trusted by the CDU owner, and generally the only person who will know who the ring-leader is and where the CDU is located
- Various layers can be built depending on need, but generally you have at the bottom of the pyramid a number of people ("runners) who recruits customers, collect their meter numbers or old slips, money and later return with voucher either in a form of a slip/receipt or just a string of numbers for customers to load into their meters.

The runners will use various tactics to recruit customers,

The Ghost CDU operation







Challenges

Challenges to be faced by the utility



- Although policing is the responsibility of the South
 African Police Service, they are dealing with many other
 serious and sometimes violent crimes which take
 priority over the electricity crimes. This makes it difficult
 for us to have a consistent team focusing on our project
 within both SAPS and the HAWKS in light of these
 competing needs and resources in short supply.
- There is a serious need to deal with the capacity constraints both in Eskom, municipalities, law enforcement agencies, etc. if we are to improve our chances of winning this battle.

Challenges to be faced by the utility ...



- Beware of the "enemy within", both from utility and the Law Enforcement Agencies side. There is suspicion that some of our employees/contractors/suppliers/police are involved with the syndicates, which makes it difficult to get to the kingpins without them being informed.
- Vulnerable customers getting enticed or coerced into buying from the illegal vendors

Challenges to be faced by the utility ...



 The legal system's capacity to handle the number of cases brought through the courts



Strategies
and Tactics

Remedial Strategies and Tactics



- Although the organisation has made major technological strides in migrating from the old stand-alone Credit vending through Up-front vending, to Online Vending, this does not completely address our historic and current Ghost vending problems
- The only sure way of eradicating this scourge once and for all is to locate the stolen CDUs, confiscate them and criminally prosecute the perpetrators of this crime
- In the short term we will continue with the policing initiatives and educating customers not to fall prey to these unscrupulous vendors.

Remedial Strategies and Tactics ...



- Our education process involves clearing unexplained credits from customers' meters, to ensure that customers can also feel the real loss. Hopefully the will see the risk and opt out of this illegal activity.
- On the other hand we will continue with the strategy of changing Supply Group Codes to ensure that customers buying from these illegal vendors will not be able to use such tokens or vouchers in their meters. This also discourages the customers from buying from these illegal vendors.

Remedial Strategies and Tactics ...



- We are also looking at a test case where customers are prosecuted for buying or in possession of stolen goods (electricity in this case).
- Our long term strategy focuses on technologies which will render the Ghost Vending machines useless in the hands of the illegal vendors. This is where our Associate members in the house today are requested to put on their thinking caps and come up with a solution...





 Working together with the Law Enforcement Agencies, we are utilising the scares resources at our disposal to do targeted enforcement/prosecution. This is led by the Eskom's Revenue Loss Unit in partnership with SAPS; The Hawks and AFU.



Remedial Strategies and Tactics ...

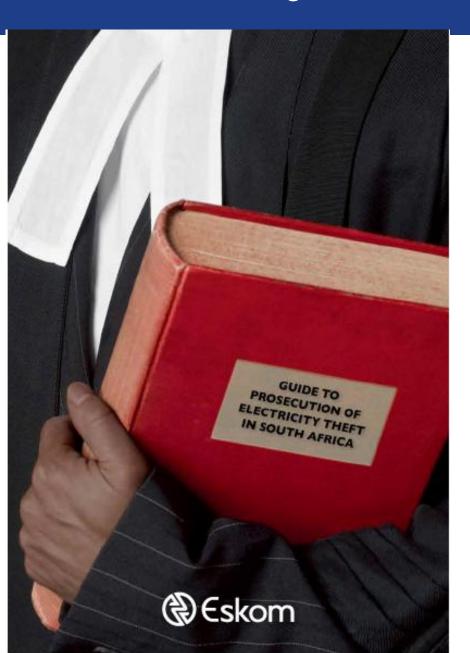


- The preferred approach is prosecution-guided investigations aimed at ensuring that every case pursued is prosecutable
 - This can only be achieved if evidence gathering and investigations are focused and thorough

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Remedial Strategies and Tactics ...





FOREWORD

Eskom is proud to present this guide for the prosecution of electricity theft. Our purpose is to assist prosecutors, investigators, Eskom and municipalities as they prepare for and prosecute cases related to electricity theft. Eskom is working closely with both the National Prosecuting Authority (NPA) and the South African Police Services (SAPS), including its Directorate for Priority Crime Investigations, the Hawks, to ensure that cases of electricity theft are thoroughly investigated and prosecuted.

During this collaboration process, it became clear that there is a gap that needs to be filled to ensure that prosecutors and investigators from SAPS, Eskom and municipalities are provided with accurate and easily accessible information on energy losses, electricity theft, and related issues. This guide is intended to fill that gap. It's not the last word on energy losses or electricity theft, but should rather be viewed as a work in progress. We therefore welcome any comments or suggestions that you feel will improve the guide.

Please forward any suggestions or ideas you may have to motaul@eskom.co.za A representative from Eskom will contact you should this be necessary.

We hope this guide provides you with the kind of assistance you require as a prosecutor or investigator, and look forward to closer co-operation and greater success in handling cases of electricity their and related matters.

Maboe Maphaka Senior Manager: Energy Trading, Eskom



Results



Achieving Results

- In the Johannesburg South High Court in March 2011, two accused were convicted of electricity theft and racketeering amongst others, and received a combined sentence of 111 year, serving an effective term of 18 and 15 years each (<u>State v Ndebele m and another, 2011</u>)
- This landmark ruling set new legal precedence in holding that electricity as an incorporeal is capable of theft.
- The Gauteng Asset Forfeiture Unit also seized property and assets belonging to the accused after the conviction.







Achieving Results ...

- 49 runners have been arrested (more still to be validated)
- 18 ghost CDU's were recovered
- Unexplained credits worth thousands of rands cleared
- Conviction in the Van der Bijl Park Magistrate Court where a 'runner'
 was sentenced to 3 years imprisonment for his involvement in the
 illegal sales of electricity
- We currently have a number of cases at various stages through the courts
- SAPS officials and Prosecutors are receiving on-going training to deal with this crime



Closing Remarks



Closing Remarks

- This problem is widespread and could potentially grow if left unchecked.
- I am of the opinion that the amounts illustrated here are just the <u>tip of the ice-berg</u>! If it was possible to quantify all the other related costs, the figures would definitely be much higher than what is shown here, which is why I believe that the impact of this crime is so **huge** that we seriously need to **discourage** anybody from even thinking about getting involved.



Closing Remarks ...

 Ghost CDU busting is an intricate and delicate process requiring very close collaboration between utilities, the Law enforcement Agencies and the community. We are seeing progress in the fight against Ghost Vending, although much slower than we would have liked.



Vlasterminds jailed in electricity voucher con The State had worked for

Lawyer files for leave to appeal because he thinks power can't be stolen

IDICE BAILEY

TWO MEN who masterminded and ran a syndicate that stole close to million worth of electricity e given a combined sen-

to of 111 years yesterday in Andile Mugadi, 36, and Mar-Ndebele, 32, were handed ir stiff sentences in the annesburg High Court.

Mngadi's four sentences nunted to 66 years in prison. They will run concurrently he will serve only 18 years

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Mngadi and Ndebele stole

Eskom prepaid credit dispensing units and sold illegal electricity vouchers for just less

than a year

Vdebele's three sentences,

credit dispensing unit used to

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He was selling electricity at a discount-R100 a voucher got

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stances of the accused and the trading and distribution unit at However, he had also looked Eskom, told the court that the at the enormity of the offence vouchers linked to the case and the duration over which it

were just the was committed. tip of the iceberg.

He called the pair's scheme a sophisticated operation and

close to three years to finalise

Mngadi, who was considered the mastermind, had two previous convictions counting

In 2004 he was found guilty of tampering with electrical apparatus and given a R4000 fine or a 18-month prison term, which was wholly suspended. In 2006, he was given a R150

fine for assault. Hendrik Potgieter, who rep-

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Mngadi and Ndebele stole Eskom prepaid credit dispensing units and sold illegal electricity vouchers for just less

The two faced 78 280 charges of theft for the vouchers that they printed and sold, and five charges of theft for the five credit dispensing units found in their possession.

Ndebele faced one charge of racketeering for participating in a enterprise engaged in racketeering. Mngadi faced the same charge and a second count of racketeering for managing the enterprise.

Mngadi, from Evaton, was initially arrested in Sasolburg

in possession of an electricity credit dispensing unit used to print youchers.

He was selling electricity at

free one, also valued at R100. Less than a vear later. Mngadi was ar-

rested again in Westonaria along with Ndebele, from Cosmo City, They were in possession of

four machines. Reports from Eskom indicated that the pair sold 87 000 vouchers, but they could be

linked to only 78 280 slips.

Yesterday, Maboe Maphaka, a senior manager in the energy trading and distribution unit at Eskom, told the court that the

a discount - R100 a voucher got you another

Eskom spent R65m to change vending system

ures even further. He said at least 58 of the machines were stolen and only 18 recovered.

vouchers linked to the case

were just the

tip of the ice-

Related

costs would

escalate the fig-

Eskom had to spend R65 million to change its vending system, Maphaka added.

Handing down sentence yesterday, Judge Colin Lamont

said he had considered the societal and personal circumstances of the accused and the nature of the offence.

However, he had also looked at the enormity of the offence and the duration over which it was committed.

He called the pair's scheme a sophisticated operation and said they were the senior people involved in the huge racket.

He said that while the accused should not be punished with a sledgehammer nor sacrificed on the altar of deterrence, the nature of the offence was serious and had had an effect on the poor.

The State had worked for close to three years to finalise the case.

Mngadi, who was considered the mastermind, had two previous convictions counting against him.

In 2004 he was found guilty of tampering with electrical apparatus and given a R4 000 fine or a 18-month prison term, which was wholly suspended.

In 2006, he was given a R150 fine for assault.

Hendrik Potgieter, who represented Mngadi and Ndebele, filed an application for leave to appeal the sentences.

After the hearing, he told The Star they would argue on a point of law that electricity can't be stolen, and they felt they had a good case.







Thank you!



Backup Slides





STATE V MINTOOR, 1996

State v Mintoor, 1996



- Accused guilty of theft of 901 units of electricity illegally diverted from municipality
- The case was taken on review and the issue before court was whether electricity is capable of being stolen in terms of the common law
- Judge Farlam held that electricity is incapable of being stolen in terms of the common law because only material or corporeal property can be the subject of theft
- He concluded that electricity therefore is incapable of being stolen and set aside both the conviction and the sentence





STATE V NDEBELE M AND ANOTHER, 2011

State v Ndebele M & Another (1)



- Three accused faced many counts, including racketeering, management of racketeering enterprise, theft of pre-paid vending machine and theft
- Theft arose from manipulation of pre-paid vending machines
- The prosecution challenged the view that electricity as incorporeal is not capable of being stolen
- Judge Lamont referred to Nissan SA Pty Ltd v Marnitz & Others, 2005 where customer had made use of credit they were not entitled to
- Underlying objection to holding that an incorporeal is capable of theft is requirement for contrectatio, and that can only be 'taking' of a physical thing

State v Ndebele M & Another (2)



- However, Judge Lamont concluded that in the Nissan matter, contrectatio was constituted by appropriation of funds - i.e. not in the physical handling and removal of physical thing from owner, but taking of credit provided by mistake.
- Appropriation constituted by appropriation of a characteristic attaching to a thing and depriving owner of that characteristic
- Similarly, he held that when electricity is stolen, an act of appropriation of the electricity is committed & the electricity distribution agency is permanently deprived of the characteristic attached to electrons viz. electricity

Ndebele (3)



This groundbreaking judgment concluded that:

"Once it is recognised in the Law of Theft that physical things can have a representative meaning and that it is capable to steal the representative meaning, it seems to me it recognises that there can be theft of electricity."

Ndebele (4)



- Further strengthened by recent study that has cast more light on the urgent need to reconsider SA's current legal position regarding the theft of something that has an existence other than a physical or tangible existence
- This is necessary if law is to keep up with trends in modern day civilisation where virtual transactions are the order-of-the-day



Thank you!